

Safety Data Sheet
acc. to OSHA HCS

Printing date 07/05/2018

Reviewed on 07/05/2018

1 Identification

- **Product identifier**
- **Trade name:** Bulk Sol™ 27
- **Article number:** SL27
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** Bulk Chemicals Inc.
1074 Stinson Drive
READING, PA 19605
USA
- **Information department:** info@bulkchemicals.us
- **Emergency telephone number:** CHEMTREC 1-800-424-9300, outside US +1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

- **Label elements**
- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

GHS02, GHS05

Danger

- **Hazard pictograms**
- **Signal word**
- **Hazard-determining components of labeling:**
- **Hazard statements**

Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy

Flammable liquid and vapor.

Causes skin irritation.

Causes serious eye damage.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Precautionary statements**

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

Health = 3

Fire = 2

Reactivity = 0

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- **HMIS-ratings (scale 0 - 4)**
 - Health = *3
 - Fire = 2
 - Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
94266-47-4	Citrus Terpenes	>25-≤50%
24938-91-8	Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy	>10-≤25%
112-34-5	diethylene glycol monobutyl ether	>10-≤25%

4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Check for and remove any contact lenses
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
 - Gastric or intestinal disorders
 - Dizziness
 - Cramp
 - skin irritation
 - eye irritation
 - Nasal and respiratory tract irritation
 - Eye contact could cause corneal injury
 - Dermatitis
 - Eye redness & pain
 - may cause allergic skin reaction
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO2, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Full firefighting gear and SCBA

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
- **Environmental precautions:**
 - Wear protective equipment. Keep unprotected persons away.
 - Do not allow product to reach sewage system or any water course.
 - Inform respective authorities in case of seepage into water course or sewage system.
 - Do not allow to enter sewers/ surface or ground water.

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· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

112-34-5	diethylene glycol monobutyl ether	30 ppm
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· PAC-2:

112-34-5	diethylene glycol monobutyl ether	33 ppm
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· PAC-3:

112-34-5	diethylene glycol monobutyl ether	200 ppm
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7 Handling and storage

· Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

No special requirements.

· Information about storage in one common storage facility:

Not required.

· Further information about storage conditions:

Store under lock and key and out of the reach of children.
Avoid high heat
Expires one year after manufacture date
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
No further relevant information available.

· Specific end use(s)

8 Exposure controls/personal protection

· Additional information about design of technical systems:

No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

112-34-5 diethylene glycol monobutyl ether		
TLV	Long-term value: 67.5* mg/m ³ , 10* ppm *Inhalable fraction and vapor	

· Additional information:

The lists that were valid during the creation were used as basis.

· Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.

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- **Breathing equipment:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:** Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves** The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed goggles
Faceshield

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Liquid
Color:	Colorless
· Odor:	Citrus
· Odor threshold:	Not determined.
· pH-value at 15.6 °C (60.1 °F):	9
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	106 °C (222.8 °F)
· Flash point:	46 °C (114.8 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	225 °C (437 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	0.9 Vol %
Upper:	5.9 Vol %
· Vapor pressure at 20 °C (68 °F):	0.1 hPa (0.1 mm Hg)
· Density at 20 °C (68 °F):	0.9364 g/cm ³ (7.81426 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.

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Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	18.2 %
VOC content:	18.18 %
	170.2 g/l / 1.42 lb/gl
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)
None of the ingredients is listed.
· NTP (National Toxicology Program)
None of the ingredients is listed.
· OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- Waste treatment methods

- Recommendation:

Dispose of waste in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

Dispose of containers in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:

- Recommendation:

Disposal must be made according to official regulations.

- Recommended cleansing agent:

Water, if necessary with cleansing agents.

14 Transport information

<ul style="list-style-type: none"> UN-Number DOT, ADR, IMDG, IATA 	UN1993
<ul style="list-style-type: none"> UN proper shipping name DOT ADR IMDG, IATA 	Flammable liquids, n.o.s. (Citrus Terpenes) 1993 Flammable liquids, n.o.s. (Citrus Terpenes) FLAMMABLE LIQUID, N.O.S. (Citrus Terpenes)
<ul style="list-style-type: none"> Transport hazard class(es) DOT, ADR, IMDG, IATA Class Label 	3 Flammable liquids 3
<ul style="list-style-type: none"> Packing group DOT, ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> Environmental hazards: Marine pollutant: 	Product contains environmentally hazardous substances: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy No
<ul style="list-style-type: none"> Special precautions for user Danger code (Kemler): EMS Number: Stowage Category 	Warning: Flammable liquids 30 F-E, S-E A
<ul style="list-style-type: none"> Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> Transport/Additional information: DOT Quantity limitations 	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
<ul style="list-style-type: none"> ADR Excepted quantities (EQ) 	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> IMDG Limited quantities (LQ) Excepted quantities (EQ) 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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• UN "Model Regulation":	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (CITRUS TERPENES), 3, III
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15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

• Section 355 (extremely hazardous substances):

None of the ingredients is listed.

• Section 313 (Specific toxic chemical listings):

112-34-5 diethylene glycol monobutyl ether

• TSCA (Toxic Substances Control Act):

24938-91-8 Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy

112-34-5 diethylene glycol monobutyl ether

• TSCA new (21st Century Act) (Substances not listed)

94266-47-4 Citrus Terpenes

24938-91-8 Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy

• New Jersey Right to Know

None of the ingredients is listed.

• Pennsylvania Right to Know

None of the ingredients is listed.

• Proposition 65

• Chemicals known to cause cancer:

None of the ingredients is listed.

• Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

• Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

• Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

• Carcinogenic categories

• EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

• NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.
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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• Department issuing SDS:

Environmental,
Safety and Health
SDS Coordinator

• Contact:

07/05/2018 / -

• Date of preparation / last revision

• Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances

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ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1